	Public Safety Communications Advisory Commission
	Standard

**Land Mobile Radio
Minimum Equipment Standard**

Effective Date: XX/XX/20XX

This document is reviewed annually. This document was last reviewed xx/xx/2013.

Record of Changes

This Record of Changes is used to record revisions to this document, including a brief description of the changes made, the date the changes went into effect by approval of the PSCC, and the appropriate PSIC Office Contact.

Change No.	Date	Description	PSIC Office Contact
0	1/23/2007	Approval by the SIEC of Policies # 06-001 rev 1.1 (VHF Minimum Equipment Standards) and # 06-002 rev 1.1 (UHF Minimum Equipment Standards)	
1	9/18/2012	Approval by the PSCC	Michael Britt
3	XX/XX/2013	Format update; Content revision to combine information from VHF and UHF Minimum Equipment Standards and incorporate 700 and 800 MHz bands; Title change to replace original references to specific frequency bands with "Land Mobile Radio"	Glade Jarman

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1 Introduction

1.1 Background

The Arizona Public Safety Communications Advisory Commission (PSCC) and Statewide Interoperability Executive Committee (SIEC) continually work to develop guidelines, recommendations and standards intended to promote public safety interoperable radio communications for all Arizona first responders. Under A.R.S. 41-3542, the PSCC is responsible for the development of a standard based system that provides interoperability of public safety agencies' communications statewide.

As outlined in Arizona's Statewide Communications Interoperability Plan (SCIP), Arizona's strategy for improving interoperable communications by leveraging existing assets, agreements, and funding sources is to pursue a system-of-systems approach to interoperable communications that leverages connections between separate local, regional, and/or state operated systems for public safety emergency response communications.

All mobile and portable radio equipment purchased through Homeland Security grants or other federal grant sources are required to meet or exceed certain standards[1]. In addition, agencies with an ongoing need to interoperate with federal agencies should meet these standards regardless of the funding source used to purchase the equipment.

1.2 Purpose

The purpose of this document is to establish land mobile radio equipment standards that, if followed, will facilitate interoperability between jurisdictions and disciplines at all levels of government. It is recommended that all mobile and portable radio equipment purchased for the purposes of public safety emergency response communications meet or exceed these minimum standards.

1.3 Definitions

- Hz: Hertz, the unit of frequency in the International System of Units (SI). It is defined as the number of cycles per second of a periodic phenomenon.

- kHz: Kilohertz, one thousand Hertz

- MHz: Megahertz, one million Hertz

- Multiband Radio

- Narrowband Capable: A radio that can operate on narrowband 12.5 kHz channels

- POC: Point of Contact

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[1] http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=334

- Project 25 (P25 or APCO-25) is a suite of standards for digital radio communications for use by federal, state/province and local public safety agencies in North America to enable them to communicate with other agencies and mutual aid response teams in emergencies.

- PSCC: The Public Safety Communications Advisory Commission provides recommendations to the PSIC Office on the development of standards based systems providing interoperability for public safety agencies' communications statewide

- PSIC: Public Safety Interoperable Communications Office responsible for advancing interoperable communication in Arizona and supporting the PSCC and the SIEC in the performance of their missions

- SIEC: The Statewide Interoperability Executive Committee is the sub-committee of the PSCC responsible for technical and operational recommendations to the PSCC. The SIEC manages the interoperability portions of the 700 MHz, UHF and VHF spectrums, and has operational oversight of AIRS

- SOP: Standard Operating Procedure

- UHF: Ultra High Frequency

- VHF: Very High Frequency

1.4 References

This document references A.R.S. 41-3542, available online at: http://aset.azdoa.gov/content/ars-41-3542.

This document reference the Responder Knowledge Base (RKB) available online at: https://www.rkb.us/search.cfm?typeid=2.

This document references the Office of Interoperability and Compatibility (OIC) guidelines, available online at: http://www.pscr.gov/outreach/safecom/grant_guidance/grant_charts.php.

~~1.3~~1.5 Administration

Arizona's Public Safety Interoperable Communications (PSIC) Office, with guidance from the Statewide Interoperability Executive Committee (SIEC) and the Public Safety Communications Advisory Commission (PSCC), is responsible for administering this procedure.

~~1.4~~1.6 Document Terminology

The terms "shall," "must," "will," and "required" are used throughout this document to indicate required parameters and to differentiate from recommended parameters. Recommendations are identified by the words "should," "desirably" and "preferably."

~~1.5~~1.7 Updates & Revisions

This document will be reviewed annually and updated as needed. Those wishing to suggest revisions or additions to this document should send their feedback electronically to psic@azpsic.gov or in writing to the PSIC Office, c/o Arizona Strategic Enterprise Technology (ASET) Office at 100 N 15th Avenue, Suite 400, Phoenix, AZ 85007.

Revisions to this document will be reviewed by the Technical and Operational Workgroup, which will recommend appropriate changes to the SIEC. The SIEC must then approve all such changes and submit them for approval to the PSCC. Revised versions of this document will be effective once approved by the PSCC.

If no revision are required the "last reviewed" date will be updated and no other changes will be made.

2   Standard

The following standards implement certain radio features, nationally recognized to promote and maintain a higher level of interoperable communications among and between public safety jurisdictions and disciplines.

Table 1: Mobile - Portables Minimum Standard

BAND	MINIMUM CHANNEL	CHANNEL DISPLAY	FREQUENCY RANGE	NARROWBAND CAPABLE	PROJECT 25[2,3]
VHF	48 CH OR GREATER	87 CHAR OR GREATER	150 – 174 MHz	REQUIRED	CAPABLE
UHF	48 CH OR GREATER	87 CHAR OR GREATER	450 – 470 MHz	REQUIRED	CAPABLE
700 MHz[4]	48 CH OR GREATER	87 CHAR OR GREATER	769 – 775 MHz 799 – 805 MHz	REQUIRED	REQUIRED
800 MHz[4]	48 CH OR GREATER	87 CHAR OR GREATER	806 – 824 MHz 851 – 869 MHz	REQUIRED	REQUIRED
Multi-Band	48 CH OR GREATER	8 CHAR OR GREATER	Variable	REQUIRED	REQUIRED

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[2]Refer to the Responder Knowledge Base (RKB) to identify equipment that is certified by the P25 Compliance Assessment Program (P25 CAP). For more information, see: https://www.rkb.us/search.cfm?typeid=2.

[3]Refer to the Office of Interoperability and Compatibility (OIC) guidelines at the Public Safety Communications Research Program (PSCR) web-site: http://www.pscr.gov/outreach/safecom/grant_guidance/grant_charts.php.

[4]Contact the ARRC or RPC (Region 3) to assure the availability and management of frequencies.